Headquarters U.S. Air Force

Integrity - Service - Excellence

Arctic Surplus Salvage Yard

Response Complete Report Pending Delisting Actions

Lt Col Daniel Welch
USAF
HQ Air Force Center for Environmental Excellence
Installation Worldwide Directorate

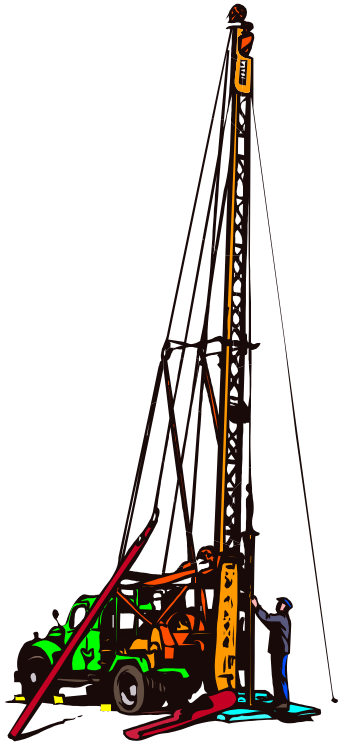
April 2004

U.S. AIR FORCE

U.S. AIR FORCE

Overview

- Background
- Proposed Remedial Action
- TEAM Description
- Remedial Action Status
- Summary



U.S. AIR FORCE

Background

- Estimated 8,500 yd^3 of PCB and Lead contaminated soils caused by battery and transformer processing
- <10 yd^3 of pesticide and dioxin contaminated soils
- Over 45,000 yd^3 of scrap materials present at the site
- Numerous waste drums, 5000 yd^3 of tires, transformers, 83 trailers and >400 pressurized gas cylinders
- Old military landfill located at the site
- Site listed on NPL in 1990

U.S. AIR FORCE

Originally Proposed Remedial Action

- ROD selected solvent extraction for PCB contaminated soils and stabilization for lead contaminated soils
- Estimated 3-4 years for completing RA at costs from $34-$38M
- Performance-Based Environmental Restoration Management Assessment (PERMA) conducted at the site in June 2002. Recommended stabilization and on-site placement of PCB and Lead contaminated soils

- **Remedial Process Optimization (RPO) estimated RA to be completed in < 2 years at a cost of $3.6M**

U.S. AIR FORCE

PERMA & RPO TEAM

- HQ Defense Logistics Agency
- Defense Reutilization Marketing Service
- HQ Air Force Center for Environmental Excellence
- US Environmental Protection Agency
- Alaska Department of Environmental Conservation
- Contractors
  - Mitretek
  - Earth Tech

U.S. AIR FORCE

Remedial Action Status

- Conducted treatability studies in Sept-Nov 2002 to demonstrate viability of proposed stabilization process.
- Obtained funding from the US ARMY - $2.5M
  - Times and materials contract awarded in September 2002
    - Clear terrain
    - Separate and decontaminate scrap
    - Identify and separate expended munitions and potential unexploded ordinance
  - Field activity initiated in October 2002

U.S. AIR FORCE

Remedial Action Status (Cont.)

- Awarded Firm Fixed Price Task Order in March 2003
  - Stabilization/solidification of contaminated soils
  - On-site placement of up to 8,500 yd^3 of soils in landfill
  - 5 years of O&M
  - Costs negotiated at $3.45M
- Started field work in May 2003
- Completed Explanation of Significant Differences (ESD) and held public meeting in June 2003
- Completed stabilization of 10,000 yd^3 of soils
- Placed soils in new landfill cell by Aug 2003

U.S. AIR FORCE

Remedial Action Status (Cont.)

- Completed landfill and multilayered cap construction by October 2003
- Excavated 100 yd^3 of PCB “hot spots” and 10 yd^3 PCB/Dioxin soils for off-site disposal
- Off-site disposal completed in December 2003.
- Remedial Action completed in 7 months
- No cost increases for additional soil stabilization or off-site disposal

U.S. AIR FORCE

Remedial Action Status (Cont.)

- Regulatory agencies appreciated prompt execution of site cleanup
- Institutional Controls agreements with site owners signed in October 2003
- Administrative Order of Consent (AOC) signed with US EPA in December 2003
- Analytical data undergoing USEPA Staged Electronic Data Deliverable implementation
- Currently developing NPL delisting strategy
- Anticipate US EPA approval on delisting by Sept 2005

U.S. AIR FORCE

Other Waste Materials

- Inspected scrap materials for expended munitions
- Scanned scrap for radiation
- Transferred over 65,000 yd^3 of scrap to local recycler
- Disposed waste drums, gas cylinders, trailers and transformers in accordance with state and federal regulations
- Gas cylinders containing CFCs (Freon) transferred to Defense Supply Center Richmond for recycling

U.S. AIR FORCE

Expended Munitions (EM)

- EM materials discovered at the site in Sept 2002. EM DEMIL started in November 2002 and is ongoing
- Over 98,000 units of EM materials removed to date
- Over 50 types of EM materials identified
- DEMIL EM materials disposed to local landfill to avoid future liability
- 19 live primers identified and disposed by Eielson AFB Explosive Ordinance Disposal (EOD) personnel. Over 330 energetic items (frag. bombs) identified and disposed
- EM DEMIL to be completed by Feb 2004. Geophysical verification survey to be completed in March 2004

U.S. AIR FORCE

Radiation Wastes

- Radiation wastes discovered during EM DEMIL operations
- Over 10 types of radiation items identified including instrument check sources and vehicle dials
- Site cleared of radiation wastes
- Geosurvey for EM materials up to 4 feet below ground surface to be completed Mar 2004

U.S. AIR FORCE

ASSY Remediation Progress

June 02

Oct 02

Feb 03

Feb 03

June 03

U.S. AIR FORCE

Remediation Complete Celebration

PCB/Lead RA Complete
6 October 2003

- Regulators
- Contractors
- Emergency Service Personnel
- Local Residents
- Site Owners
- Eielson AFB, AFCEE, DLA & DRMS

U.S. AIR FORCE

Institutional Controls Complete

WARNING
DO NOT DISTURB OR DIG IN FENCED AREA
TREATED HAZARDOUS WASTE SOIL PRESENT BELOW ASPHALT
For Information Contact State of Alaska
Department Of Environmental Conservation
(907) 451-2360 or
United States Environmental Protection Agency
1-800-424-4272

16 December 2003

U.S. AIR FORCE

Summary

- ADEC Refers to Arctic Surplus as a MODEL to follow for environmental cleanup
  - **Team work and trust**
  - **Regulatory involvement from planning stages**
  - **First application of Performance-Based Environmental Management Assessment (PERMA)**
  - **Open and frequent communication**
  - **Real-time document reviews by all stakeholders**
  - **Model presently being followed at Galena AFB,King Salmon AFB, and Defense Supply Center Richmond**

U.S. AIR FORCE

Q & A